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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,268	08/14/2006	Ines Pietsch	294539US0PCT	6047
22850	7590	10/10/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			KWAK, JAE J	
			ART UNIT	PAPER NUMBER
			4131	
			NOTIFICATION DATE	DELIVERY MODE
			10/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/589,268	PIETSCH ET AL.	
	Examiner	Art Unit	
	JAE KWAK	4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/23/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/14/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiser et al. (US patent 5,342,916) in view of Pabst et al. (This rejection is over WO03/016578 to Pabst et al. because it qualifies as prior art under 102(b), however, for convenience, the English language equivalent, US 6,881,356, will be referred to below.)

Weiser et al. discloses a process for preparing a polymer powder by spraying the polymer powder with a spraying aid of sulfonated phenols. See the abstract, and col. 5, lines 54 to col. 6, line 3. The sulfonated phenols of Wieser et al. are characterized as usable as a tanning agent and spraying assistants. See the abstract. The phenols of Weiser et al. are with waterborne, i.e., water dispersible, polymers. See col. 5, lines 54-57.

Weiser et al. fails to disclose the specific reaction product called “spray assistant A” which includes an aliphatic aldehyde and the sodium sulfite, whereas the present claims requires “spray assistant A” solution during the spray drying process.

Pabst et al. teaches a process for preparing a novel solution (spray assistant A) of sulfone-containing tanning materials having a dihydroxydipheny sulfone, an aliphatic aldehyde of 1 to 6

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carbon atoms per mole and the sodium sulfite per mole of dihydroxydiphenyl sulfone [DHDPS] at from 90° to 180° (See the abstract). This solution provides advantageous properties to tanning materials with a good tanning effect and good penetrations that will provide leathers having good fastness, softness and fullness.

It would have been obvious to one ordinary skill in art at the time of invention was made to have modified the condensation polymer process disclosed in Weiser et al. by incorporating solution "spray assistant A" as suggested by Pabst et al. because it provides advantageous properties to the condensation polymers in both of tanning and spray drying applications.

As instant claim 2, Pabst et al. discloses the isomers of dihydroxydiphenyl sulfones including the 4,4'-dihydroxydiphenyl sulfone compound. (Col. 3, line 40)

As instant claim 3, Pabst et al. discloses the aqueous solution consisting dihydroxydiphenyl sulfone is under pressure. (Col. 4, Line 26).

As instant claim 4, Pabst et al. teaches one in ordinary skill in arts to achieve an aqueous solution having pH less than or equal to seven by adding a alkali metal hydroxide or ammonia. (Col. 4 line 10).

The recitations of instant claims 5 and 6 can be found in Pabst et al. at (Col. 4, lines 50-55).

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiser et al. (US patent 5,342,916) in view of Pabst et al. as applied to claim 1 above, and further view of Weitzel et al. (US patent 6,127,483).

Weiser et al. discloses a process of manufacturing the condensation polymers to be used as both tanning agents and spraying aids to redisperse polymer powders.

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Weiser et al. disclose the monomer an acrylamide in the polymer powder that can be easily redispersible in water, but present claim fails to disclose such monomer.

Weitzel et al. discloses a dispersion-powder composition comprising a vinyl ester-ethylene copolymer, which can be redispersible in water (Abstract and Col. 4, lines 43-44).

It would have been obvious to one ordinary skill in art at the time of invention was made to have modifying the condensation polymer compositions disclosed in Weiser et al. by vinyl ester-ethylene polymer as suggested by Weitzel et al. because it provides advantageous properties to the condensation polymers that can be easily redisperses in water.

The recitations of instant claim 8 can be found in Weitzel et al. at Col. 1 lines 40-50, Col. 2 lines 30-59, and Col. 4 line 12.

The recitations of instant claim 9 can be found in Weitzel et al. at (Col. 3 line 18).

The recitations of instant claim 10 can be found in Weitzel et al. at (Col. 5 line 21).

The recitations of instant claim 12 can be found in Weitzel et al. at (Col. 1 line 10).

2. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pabst et al. (WO03/016578 corresponds to the US Patent 6,881,356) in view of Weitzel et al. (US patent 6,127,483)

Pabst et al. teaches a process for preparing a solution of sulfone-containing tanning materials having a dihydroxydiphenyl sulfone, an aliphatic aldehyde of 1 to 6 carbon atoms per mole and the sodium sulfite per mole of dihydroxydiphenyl sulfone [DHDPS] at from 90 to 180.degree. (Abstract) Motivation using above process is to provide tanning materials having a good tanning effect and good penetration that will provide leathers with good fastness properties softness and fullness.

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Pabst et al. silent on the use of spray drying and in dispersing polymer powder.

Weitzel et al. discloses a dispersion-powder composition comprising a vinyl ester-ethylene copolymer, which is obtained by spraying method. (Abstract and Col. 4 lines 43-44). Using what Weitzel et al. teaches with expected success of re-dispersion solutions in polymer powder by spraying method one can achieve uniform aqueous polymer dispersion.

It would have been obvious to one ordinary skill in art at the time of invention was made to have modified “solution assistant A” by incorporating it with spray drying process to redisperse polymer powder in aqueous solutions. As suggested by Weitzel et al. because it's useful in pulverulent, re-dispersibility of binders.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Weitzel et al. (US Patent 6,127,483).

Claims 11 and 13 define the product by how the product was made. Thus, claims 11 and 13 are product-by-process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present case, the recited steps imply a structure being identified to the claimed polymer powder. The reference suggests such a product.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAE KWAK whose telephone number is (571)270-7339. The examiner can normally be reached on Monday to Friday 8:00 A.M. EST 5:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/
Supervisory Patent Examiner
Art Unit 4131

/J.K./